

Title (en)

DETECTION OF RESONANT TAGS BY UWB RADAR

Title (de)

DETEKTIERUNG VON RESONANTEN ETIKETTEN MIT UWB RADAR

Title (fr)

DÉTECTION DE MARQUEURS RESONNANTS PAR RADAR UWB

Publication

EP 2027488 B1 20191218 (EN)

Application

EP 07719213 A 20070522

Priority

- BE 2007000049 W 20070522
- US 80257806 P 20060522
- EP 06447069 A 20060523
- EP 07719213 A 20070522

Abstract (en)

[origin: EP1860458A1] A detection system has a receiver for detecting a material having a magnetic resonance response to illumination by pulses of UWB electromagnetic radiation, the receiver having: a detector (40,45) for detecting the pulses after they have interacted with the material, and a discriminator (55) arranged to identify in the detected pulses the magnetic resonance response of the material. By scanning an item tagged with a tag (20) having a material having a magnetic resonant response, by illuminating the item with UWB pulses and identifying in detected pulses the magnetic resonance response of the material, items can be located, imaged, or activated. The magnetic resonance response of the tag can cause activation of the tag. The tag can have a magnetic resonance response arranged to provide an identifiable magnetic resonance signature such that different tags can be identified and distinguished by their signatures.

IPC 8 full level

H04B 1/69 (2011.01)

CPC (source: EP US)

G01S 7/411 (2013.01 - EP US); **G01S 13/0209** (2013.01 - EP US); **G01S 13/75** (2013.01 - EP US); **H04B 1/7163** (2013.01 - EP US); **A61N 1/403** (2013.01 - EP US); **G01S 13/753** (2013.01 - EP US)

Citation (examination)

US 6914552 B1 20050705 - MCEWAN THOMAS E [US]

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IS IT LI LT LU LV MC MT NL PL PT RO SE SI SK TR

DOCDB simple family (publication)

EP 1860458 A1 20071128; EP 2027488 A1 20090225; EP 2027488 B1 20191218; JP 2009537259 A 20091029; JP 5145330 B2 20130213; US 2008252293 A1 20081016; US 7719280 B2 20100518; WO 2007134410 A1 20071129

DOCDB simple family (application)

EP 06447069 A 20060523; BE 2007000049 W 20070522; EP 07719213 A 20070522; JP 2009511307 A 20070522; US 75015507 A 20070517